

REMARKS

Claims 1-25 were originally filed in the present application.

Claims 1-25 are pending in the present application.

Claims 1, 6, 14 and 18 were previously amended.

Claims 1-25 were rejected in the March 9, 2005 Office Action.

Reconsideration of the claims is respectfully requested. The arguments of the previously-filed response are incorporated herein by reference, and are re-urged.

In the March 9, 2005 Office Action, the Examiner rejected Claims 1-5, 10-13 and 18-21 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,907,582 to *Yi* (hereinafter, simply "*Yi*"). The Applicant respectfully traverses this rejection.

The final rejection of these claims relies on a misreading of *Yi*. Claim 1 requires "an interleaver unit coupled to said first Turbo encoder, said interleaver unit capable of interleaving Turbo encoded data from said first Turbo encoder."

As described in the previous response, FIGURE 3 of the *Yi* reference clearly indicates that the digital source information from audio encoder 120 data is input in parallel to the interleaver 132 and the first turbo encoder 134. Thus, the output of the first turbo encoder 134 in the *Yi* reference is not applied as an input to the interleaver 132.

The final office action relies solely on *Yi*'s claim 16 for the anticipation rejections of claims 1-5, 10-13, and 18-21:

16. A digital communication system, comprising:

- (A) a broadcast data source comprising:
- (1) a first turbo encoder for turbo encoding digital source information into a first code sequence,
 - (2) an interleaver for interleaving the digital source information,
 - (3) a second turbo encoder for turbo encoding the interleaved digital source information into a second code sequence,... (*emphasis added*)

According to this claim, *Yi*'s "first turbo encoder" takes "digital source information" as an input and encodes it into "a first code sequence" output. *Yi*'s interleaver has as an input the same "digital source information" as the first turbo encoder, and outputs an "interleaved digital source information." This is entirely consistent with *Yi*'s Figure 3.

What *Yi* does not teach, in claim 16 or anywhere else, is an interleaver that interleaves "Turbo encoded data from said first Turbo encoder." The Examiner appears to misread *Yi*'s claim 16 as indicating that the interleaver operates on a turbo-encoded "digital source information" – this is incorrect, as this claim clearly uses the term "first code sequence" to identify the product of the first turbo-encoding process. The "digital source information" is a parallel input to both the first turbo encoder and the interleaver, and thus *Yi*'s interleaver does not meet the claimed limitation of interleaving "Turbo encoded data from said first Turbo encoder."

For a proper anticipation rejection, the reference must show all of the claimed elements connected and interrelating as claimed. *Yi* does not do so. The anticipation rejection of claims 1-5, 10-13 and 18-21 is traversed.

If the Examiner still has difficulty seeing this distinction, he is cordially requested to telephone the undersigned attorney to discuss the matter before Applicant is put to the expense of preparing an appeal brief.

In the March 9, 2005 Office Action, the Examiner rejected Claims 6-9, 14-17 and 22-25 under 35 U.S.C. §103(a) as being unpatentable over the *Yi* reference in view of U.S. Patent No. 6,397,367 to *Park et al.* (hereinafter, simply "*Park*"). The Applicant respectfully traverses this rejection.

The Examiner concedes that *Yi* does not teach multiplexing the data from the first and second turbo encoders. Applicant argued and demonstrated that the proposed modification of the *Yi* system by the teaching of the *Park* reference – multiplexing the uninterleaved output of the first turbo encoder with the interleaved output of the second turbo encoder – would defeat the feature of the *Yi* system that provides “significantly improved performance.” As such, the *Yi* reference actually teaches away from the proposed combination.

The Examiner’s response, in the final office action, is “*Yi* is basically teaching the same system as the applicant’s invention.” This response ignores that *Yi* does not teach or suggest multiplexing data from the outputs of the first and second turbo encoders, and that *i* teaches away from adding a multiplexer since the objects of *Yi*’s invention require transmitting the unmultiplexed data over “two complementary satellite data streams.” *Yi* teaches away from any combination or

modification to add a multiplexer as claimed, and any such modification would defeat the objects of *Yi*'s system, and render *Yi*'s system inoperable.

As the Office Action has not (and indeed cannot) show a proper motivation to modify *Yi* or combine it with *Park* to produce the claimed inventions, claims 6-9, 14-17 and 22-25 should be allowed over all art of record.

All rejections are traversed.

SUMMARY

For the reasons given above, the Applicant respectfully requests reconsideration and allowance of pending claims and that this Application be passed to issue. If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *jmockler@davismunck.com*.

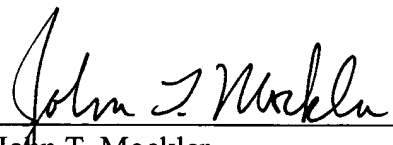
The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

Date: 28 April 2005

P.O. Drawer 800889
Dallas, Texas 75380
Phone: (972) 628-3600
Fax: (972) 628-3616
E-mail: *jmockler@davismunck.com*



John T. Mockler
Registration No. 39,775